1627

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/049,847B

DATE: 07/24/2002
TIME: 14:12:07

Input Set : A:\102.166A-1.txt
Output Set: N:\CRF3\07242002\I049847B.raw

```
      <110> APPLICANT: Bay, Sylvie
            Cantacuzene, Daniele
            Leclerc, Claude
            Lo-Man, Richard
      <120> TITLE OF INVENTION: MULTIPLE ANTIGEN GLYCOPEPTIDE CARBOHYDRATE,
            VACCINE COMPRISING THE SAME AND USE THEREOF
      <130> FILE REFERENCE: 102.166A-1
C-->  <140> CURRENT APPLICATION NUMBER: US/09/049,847B
C-->  <141> CURRENT FILING DATE: 1998-03-27
      <150> PRIOR APPLICATION NUMBER: US 09/049,847
      <151> PRIOR FILING DATE: 1998-03-27
      <150> PRIOR APPLICATION NUMBER: US 60/041,726
      <151> PRIOR FILING DATE: 1997-03-27
      <160> NUMBER OF SEQ ID NOS: 25
      <170> SOFTWARE: PatentIn version 3.1
      <210> SEQ ID NO: 1
      <211> LENGTH: 15
      <212> TYPE: PRT
      <213> ORGANISM: Clostridium tetani
      <400> SEQUENCE: 1
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1               5                   10                  15
      <210> SEQ ID NO: 2
      <211> LENGTH: 21
      <212> TYPE: PRT
      <213> ORGANISM: Clostridium tetani
      <400> SEQUENCE: 2
Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser
1               5                   10                  15
Ala Ser His Leu Glu
            20
      <210> SEQ ID NO: 3
      <211> LENGTH: 12
      <212> TYPE: PRT
      <213> ORGANISM: Clostridium tetani
      <400> SEQUENCE: 3
Gly Gln Ile Gly Asn Asp Pro Asn Arg Asp Ile Leu
1               5                   10
      <210> SEQ ID NO: 4
      <211> LENGTH: 13
      <212> TYPE: PRT
      <213> ORGANISM: Poliovirus
      <400> SEQUENCE: 4
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     70 Lys Leu Phe Ala Val Trp Lys Ile Thr Tyr Lys Asp Thr
     71 1               5                   10
     74 <210> SEQ ID NO: 5
     75 <211> LENGTH: 15
     76 <212> TYPE: PRT
     77 <213> ORGANISM: Escherichia coli
     79 <400> SEQUENCE: 5
     81 Asn Gly Lys Leu Ile Ala Tyr Pro Ile Ala Val Glu Ala Leu Ser
     82 1               5                   10                  15
     85 <210> SEQ ID NO: 6
     86 <211> LENGTH: 13
     87 <212> TYPE: PRT
     88 <213> ORGANISM: ARTIFICIAL SEQUENCE
     90 <220> FEATURE:
     91 <223> OTHER INFORMATION: Designed peptidic T-Helper Cell epitope that typically binds
to a
     92       plurality of human and murine Major Histocompatibility Complex
     93       Class II molecules
     95 <220> FEATURE:
     96 <221> NAME/KEY: MISC_FEATURE
     97 <222> LOCATION: (1)..(1)
     98 <223> OTHER INFORMATION: Xaa=D-Ala
    101 <220> FEATURE:
    102 <221> NAME/KEY: MISC_FEATURE
    103 <222> LOCATION: (3)..(3)
    104 <223> OTHER INFORMATION: Xaa=L-cyclohexyl-Ala
    107 <220> FEATURE:
    108 <221> NAME/KEY: MISC_FEATURE
    109 <222> LOCATION: (13)..(13)
    110 <223> OTHER INFORMATION: Xaa=D-Ala
    113 <400> SEQUENCE: 6
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    116 1               5                   10
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    120 <211> LENGTH: 10
    121 <212> TYPE: PRT
    122 <213> ORGANISM: Human papillomavirus type 16
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    125 <221> NAME/KEY: MISC_FEATURE
    126 <223> OTHER INFORMATION: HPV16 E7 PEPTIDE
    129 <400> SEQUENCE: 7
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    132 1               5                   10
    135 <210> SEQ ID NO: 8
    136 <211> LENGTH: 10
    137 <212> TYPE: PRT
    138 <213> ORGANISM: Human papillomavirus type 16
    140 <220> FEATURE:
    141 <221> NAME/KEY: MISC_FEATURE
    142 <223> OTHER INFORMATION: HPV16 E7 PEPTIDE
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Input Set : A:\102.166A-1.txt
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145 <400> SEQUENCE: 8
147 Ala Glu Pro Asp Arg Ala His Tyr Asn Ile
148 1 5 10
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152 <211> LENGTH: 19
153 <212> TYPE: PRT
154 <213> ORGANISM: Human papillomavirus type 16
156 <220> FEATURE:
157 <221> NAME/KEY: MISC_FEATURE
158 <223> OTHER INFORMATION: HPV 16 E7 PEPTIDE
161 <400> SEQUENCE: 9
163 Lys Cys Asp Ser Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Ile
164 1 5 10 15
167 Arg Thr Leu
171 <210> SEQ ID NO: 10
172 <211> LENGTH: 10
173 <212> TYPE: PRT
174 <213> ORGANISM: Human papillomavirus type 16
176 <220> FEATURE:
177 <221> NAME/KEY: MISC_FEATURE
178 <223> OTHER INFORMATION: HPV16 E7 PEPTIDE
181 <400> SEQUENCE: 10
183 Gly Thr Leu Gly Ile Val Cys Pro Ile Cys
184 1 5 10
187 <210> SEQ ID NO: 11
188 <211> LENGTH: 13
189 <212> TYPE: PRT
190 <213> ORGANISM: Homo sapiens
192 <400> SEQUENCE: 11
194 Lys Leu Val Val Val Gly Ala Arg Gly Val Gly Lys Ser
195 1 5 10
198 <210> SEQ ID NO: 12
199 <211> LENGTH: 15
200 <212> TYPE: PRT
201 <213> ORGANISM: Homo sapiens
203 <400> SEQUENCE: 12
205 His Leu Asp Met Leu Arg His Leu Tyr Gln Gly Cys Gln Val Val
206 1 5 10 15
209 <210> SEQ ID NO: 13
210 <211> LENGTH: 15
211 <212> TYPE: PRT
212 <213> ORGANISM: Homo sapiens
214 <400> SEQUENCE: 13
216 Ser Arg Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Val
217 1 5 10 15
220 <210> SEQ ID NO: 14
221 <211> LENGTH: 14
222 <212> TYPE: PRT
223 <213> ORGANISM: Homo sapiens

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Input Set : A:\102.166A-1.txt
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225 <400> SEQUENCE: 14
227 Leu Leu Lys Tyr Arg Ala Arg Glu Pro Val Thr Lys Ala Glu
228 1 5 10
231 <210> SEQ ID NO: 15
232 <211> LENGTH: 10
233 <212> TYPE: PRT
234 <213> ORGANISM: POLIOVIRUS
236 <400> SEQUENCE: 15
238 Phe Ala Val Trp Lys Ile Thr Tyr Lys Asp
239 1 5 10
242 <210> SEQ ID NO: 16
243 <211> LENGTH: 14
244 <212> TYPE: PRT
245 <213> ORGANISM: Clostridium tetani
247 <400> SEQUENCE: 16
249 Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu
250 1 5 10
253 <210> SEQ ID NO: 17
254 <211> LENGTH: 11
255 <212> TYPE: PRT
256 <213> ORGANISM: ARTIFICIAL SEQUENCE
258 <220> FEATURE:
259 <223> OTHER INFORMATION: Designed synthetic linear glycopeptide containing a saccharidic
260 B-cell epitope and a CD4+ T-cell epitope able to induce anti-
261 saccharidic antibodies
263 <400> SEQUENCE: 17
265 Ser Thr Thr Gly Gly Gly Gly Gly Gly Lys Gly
266 1 5 10
269 <210> SEQ ID NO: 18
270 <211> LENGTH: 11
271 <212> TYPE: PRT
272 <213> ORGANISM: ARTIFICIAL SEQUENCE
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Designed synthetic linear glycopeptide containing a saccharidic
276 B-cell epitope and a CD4+ T-cell epitope able to induce anti-
277 saccharidic antibodies
279 <220> FEATURE:
280 <221> NAME/KEY: MISC_FEATURE
281 <222> LOCATION: (1)..(1)
282 <223> OTHER INFORMATION: alpha-N-acetylgalactosamine (GalNAc)-Serine
285 <220> FEATURE:
286 <221> NAME/KEY: MISC_FEATURE
287 <222> LOCATION: (2)..(3)
288 <223> OTHER INFORMATION: alpha-N-acetylgalactosamine (GalNAc)-Threonine
291 <400> SEQUENCE: 18
293 Ser Thr Thr Gly Gly Gly Gly Gly Gly Lys Gly
294 1 5 10
297 <210> SEQ ID NO: 19
298 <211> LENGTH: 11

RAW SEQUENCE LISTING DATE: 07/24/2002
PATENT APPLICATION: US/09/049,847B TIME: 14:12:07

Input Set : A:\102.166A-1.txt
Output Set: N:\CRF3\07242002\I049847B.raw

299 <212> TYPE: PRT
300 <213> ORGANISM: ARTIFICIAL SEQUENCE
302 <220> FEATURE:
303 <223> OTHER INFORMATION: Designed synthetic linear glycopeptide containing a saccharidic
304 B-cell epitope and a CD4+ T-cell epitope able to induce anti-
305 saccharidic antibodies
307 <220> FEATURE:
308 <221> NAME/KEY: MISC_FEATURE
309 <222> LOCATION: (1)..(1)
310 <223> OTHER INFORMATION: alpha-N-acetylgalactosamine (GalNAc)-Serine
313 <220> FEATURE:
314 <221> NAME/KEY: MISC_FEATURE
315 <222> LOCATION: (2)..(3)
316 <223> OTHER INFORMATION: alpha-N-acetylgalactosamine (GalNAc)-Threonine
319 <220> FEATURE:
320 <221> NAME/KEY: MISC_FEATURE
321 <222> LOCATION: (10)..(10)
322 <223> OTHER INFORMATION: Biotinylated
325 <400> SEQUENCE: 19
327 Ser Thr Thr Gly Gly Gly Gly Gly Gly Lys Gly
328 1 5 10
331 <210> SEQ ID NO: 20
332 <211> LENGTH: 11
333 <212> TYPE: PRT
334 <213> ORGANISM: ARTIFICIAL SEQUENCE
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Designed synthetic linear glycopeptide containing a saccharidic
338 B-cell epitope and a CD4+ T-cell epitope able to induce anti-
339 saccharidic antibodies
341 <220> FEATURE:
342 <221> NAME/KEY: MISC_FEATURE
343 <222> LOCATION: (7)..(8)
344 <223> OTHER INFORMATION: alpha-N-acetylgalactosamine (GalNAc)-Threonine
347 <400> SEQUENCE: 20
349 Lys Gly Gly Gly Gly Ser Thr Thr Gly Gly Gly
350 1 5 10
353 <210> SEQ ID NO: 21
354 <211> LENGTH: 14
355 <212> TYPE: PRT
356 <213> ORGANISM: ARTIFICIAL SEQUENCE
358 <220> FEATURE:
359 <223> OTHER INFORMATION: Designed synthetic linear glycopeptide containing a saccharidic
360 B-cell epitope and a CD4+ T-cell epitope able to induce anti-
361 saccharidic antibodies
363 <220> FEATURE:
364 <221> NAME/KEY: MISC_FEATURE
365 <222> LOCATION: (1)..(1)
366 <223> OTHER INFORMATION: alpha-N-acetylgalactosamine (GalNAc)-Serine
369 <400> SEQUENCE: 21

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/24/2002
PATENT APPLICATION: US/09/049,847B TIME: 14:12:08

Input Set : A:\102.166A-1.txt
Output Set: N:\CRF3\07242002\I049847B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 1,3,13

VERIFICATION SUMMARY DATE: 07/24/2002
PATENT APPLICATION: US/09/049,847B TIME: 14:12:08

Input Set : A:\102.166A-1.txt
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L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0